A BELDEN BRAND

XPON ONT 1GE with Wi-Fi n

OP1GWS
Installation Manual

Rev 1.0

1.1 Product Description

Thanks for choosing the 1LAN+WiFi Home Gateway Unit. All PPC terminal devices are designed for fulfilling FTTH and triple play service demand of fixed network operators or cable operators. These boxes are based on the mature GPON and Gigabit EPON technology, which have high ratio of performance to price, and the technology of 802.11n WiFi (2T2R), Layer 2/3. They are highly reliable and easy to maintain, with guaranteed QoS for different service. And they are fully compliant with GPON and EPON technical regulations such as ITU-T G.984.x, IEEE802.3ah and technical requirement of EPON Equipment. Dual mode PPC ONT can detect and exchange PON mode automatically.

1.2 Application Chart

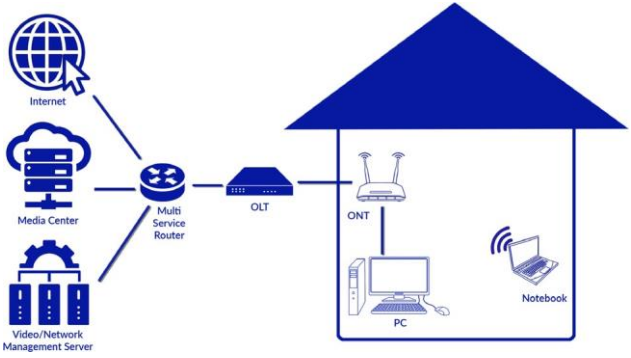

Fig 1 : **Network Architecture**

Fig 2: **OP1GWS**

1.3 Technical Parameters

Technical items	OP1GWS (1GE+WiFi Opterna ONT)
PON interface	1 GPON/EPON interface, SC single-mode/single-fiber. GPON: uplink 1.25Gbps, downlink 2.5Gbps; EPON: symmetric 1.25Gbps.
Wavelength	Tx 1310nm, Rx 1490nm
Optical interface	SC/APC
LAN interface	1x 10/100/1000Mbps auto adaptive Ethernet interfaces.10/100M Full/Half, 1000M Full Duplex, RJ45 connector.
Wireless	Compliant with IEEE802.11b/g/n, 300Mbps, 2T2R, 1 internal antenna, 1 external antenna.
LED	5, For Status of POWER, LOS, PON, LAN, WiFi.
Operating condition	Temperature: -5°C~55°C Humidity: 10%~90% (non-condensing)
Storing condition	Temperature:- 30°C~60°C Humidity :10%~90% (non-condensing)
Power supply	DC 12V/0.5A
Power consumption	≤6W
Dimension	120mm×78mm×30mm (L×W×H)
Net weight	0.13Kg

1.4 Package Contents

Contents	Quantity
Opterna ONT	1 pcs
Power Adapter	1 pcs
User manual	1 pcs

2.1 Installation Requirements

Installation Environment Requirements

PPC ONT equipment must be installed in the interior, and to ensure the following conditions:

- Confirmation at the Opterna ONT installation at sufficient space to facilitate cooling machine.
- Opterna ONT suitable operating temperature of -5°C ~ 55°C, humidity 10% to 90%.
- Device workplace should avoid radio transmitters, radar stations, and high-frequency interference from power equipment.

Equipment Installation

1. Installed on the desktop
   Place the machine on a clean bench, this installation is relatively simple, you can observe the following operation:
   - Ensure the smooth workbench.
   - Around the device enough space for heat dissipation.
2. Mounted on the wall
   - Observation Opterna ONT equipment chassis two cruciform recess, in accordance with the position of the groove, installed two screws in the wall.
   - The original selected two mounting screws gently snap into recesses aligned.
   - Slowly let go, so that the device under the support of the screw hanging on the wall.

2.2 LED Indications

LED	Panel Marking	Status	Description
Power	POWER	On	The device is powered up.
		Off	The device is powered down.
Optical signal loss	LOS	Blink	Device does not receive optical signals.
		Off	Device has received optical signal.
Registration	REG	On	The device is registered to PON system
		Off	Device is not registered to PON system
		Blink	Device is registration is incorrect
Interface	LINK/ACT	On	Port is connected properly (LINK).
		Off	Port connection exception or not connected.
		Blink	Port is sending or/and receiving data (ACT).
WiFi	WiFi	On	WiFi is running.
		Off	WiFi is not working.

Fig 3: **ONU Back Panel**

Name	Function
PON	Connect to OLT by SC type fiber connector, single mode optical fiber cable.
LAN	Connect PC or other devices with Ethernet port by Cat5 cable, RJ-45 connector.
RST	Press RST button over 10 seconds, onu restores factory default and reboot.
POWER	Connect with power adapter. DC 12V, 0.5A.

1LAN+WiFi dual mode Opterna ONT provides simple Web management function.

3.1 Default Configuration

The following is the default device configuration information.

- Local (LAN access) Username: admin , Password: OPTERNA (in Caps)
- LAN port management IP address: 192.168.1.1/24

3.2 Basic Configuration

Fig 4: **Login Interface**

Web login default username: **admin** Password: **OPTERNA** (in Caps)

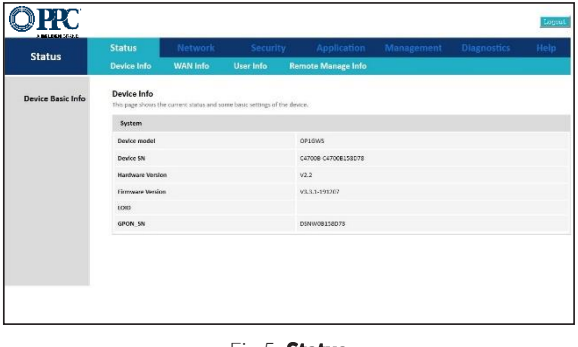

Fig 5: **Status**

WAN Info display the status of all WAN connections and the network information.

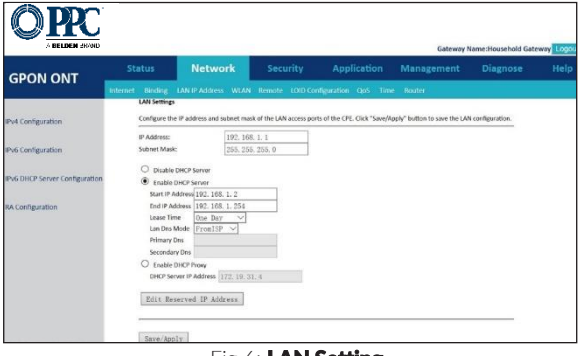

Fig 6: **LAN Setting**

IP Address and Subnet Mask: LAN port IP address and Mask.
DHCP option: Enable or disable DHCP server and configure IP address pool, DNS, etc.
Note: DHCP server changes take effect after the device is restarted.

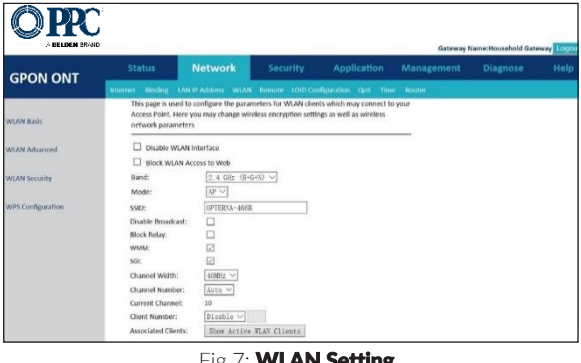

Fig 7: **WLAN Setting**

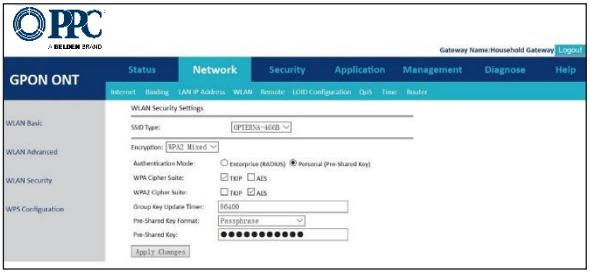

Fig 8: **WLAN security setting**

WLAN Basic displays the current configuration information. Modify these parameters to Change WiFi basic features.
Security is used to set up encryption for SSID

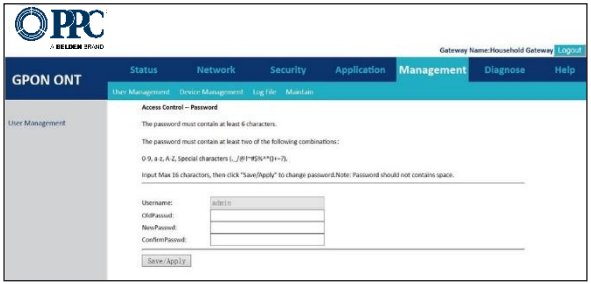

Fig 9: **User manage settings**

User manage modify the password of ordinary user account of “user”